



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

International Patent Classification ⁶ : C08G 63/685, 75/26, A61K 9/16	A1	(11) International Publication Number: WO 98/28357
		(43) International Publication Date: 2 July 1998 (02.07.98)

International Application Number: **PCT/CA97/00980**

International Filing Date: **19 December 1997 (19.12.97)**

Priority Data:
08/770,850 20 December 1996 (20.12.96) US

Applicant (for all designated States except US): CONNAUGHT LABORATORIES LIMITED [CA/CA]; 1755 Steeles Avenue, North York, Ontario M2R 3T4 (CA).

Inventors; and

Inventors/Applicants (for US only): SOKOLL, Kenneth, K. [CA/CA]; 43 Dod's Drive, Alton, Ontario L0N 1A0 (CA). CHONG, Pele [CA/CA]; 32 Estoril Street, Richmond Hill, Ontario L4C 0B6 (CA). KLEIN, Michel, H. [CA/CA]; 16 Munro Boulevard, Willowdale, Ontario M2P 1B9 (CA).

Agent: STEWART, Michael, I.; Sim & McBurney, 6th floor, 330 University Avenue, Toronto, Ontario M5G 1R7 (CA).

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

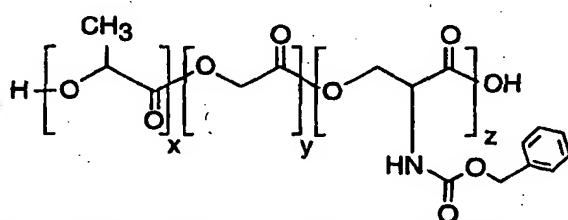
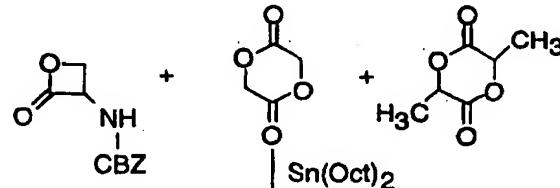
Published

With international search report.

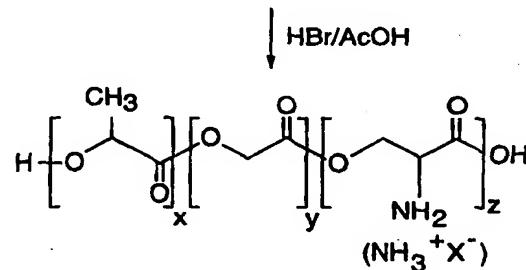
Title: BIODEGRADABLE TARGETABLE MICROPARTICLE DELIVERY SYSTEM

Abstract

Copolymers designed for use as particulate carriers containing functionalizable amino acid subunits for coupling targeting ligands are described. The copolymers are polyesters composed of α -hydroxy acid subunits such as D,L-lactide and pseudo- α -amino acid subunits which may be derived from serine or terpolymers of D,L-lactide, glycolide and pseudo- α -amino acid subunits which may be derived from serine. Stable vaccine preparations useful as delayed release formulations containing antigenic antigens and adjuvants encapsulated within or physically associated with polymeric microparticles are described. The particulate carriers are useful for delivering agents to the immune system of a subject by mucosal or parenteral routes to produce immune responses, including antibody and cell mediated responses.



Poly-D,L-Lactide-co-Glycolide-co-pseudo-L-Z-Serine Ester (PLGpZS)



Poly-D,L-Lactide-co-Glycolide-co-pseudo-L-Serine Ester (PLGpS)

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						